

Appl. No. 10/783,792
Amdt. Dated December 30, 2008
Reply to Office Action of June 30, 2008

REMARKS/ARGUMENTS

Claims 1-12 were pending in this application.

Claims 1-12 stand rejected under 35 USC 103(a) as being unpatentable over Butterfield et al. US20040193453 in view of De La Huerga US20020038392. This rejection is respectfully traversed for the reasons that follow.

Butterfield et al. disclose an infusion data communication system that provides a passive (liquid fluid-based) communication link between a fluid container or IV line, an infusion pump and a patient. Data devices or transponders are located at the patient and the fluid container or IV line. The transponders conduct low power RF energy containing identification data through the medical fluid. The data is read from the fluid by one or more readers at the infusion pump and a comparison can be made verifying that the right medication is being mounted for delivery to the right patient. [Abstract] Unfortunately, the actual patient determination cannot be completed until a vascular access device is inserted into the patient and connected to the downstream end of the line primed with the liquid medical fluid. See paragraph [0069] of Butterfield et al. Thus, an unintended patient can still be exposed to vascular access with an undesired medical fluid.

Although paragraph [0037] contemplates that the "readers" on the pump may also transmit interrogation signals to the transponders, the signals are clearly taught to be sent via the medical fluid or the patient's body. See paragraph [0026], which recites that the "communication network" ... "uses the IV fluid and the patient's body as carriers of low power radio frequency (RF) signals." The low power RF frequencies are specifically selected so they are not high enough to radiate through the tubing and ambient air. [0045] Transmission of the signals only occurs as a result of the ionic nature of the fluid and the capacitive coupling of the readers to fluid through the conduit wall as shown in FIG. 5 and discussed in paragraph [0048]. The signal from the patient transponder 92 goes through the patient's body to avoid "cross-talk" (source and intended destination) confusion that could result if the signals are airborne. This cross-talk problem is also discussed in paragraphs [0039]-[0040]. The primary purpose and teaching of Butterfield et al. is best summarized in paragraph [0030]. The main purpose is to help verify that correct medical fluid containers are mounted to correct pump channels and connected to the correct patient. As Butterfield et al. state in several places, the only way to do this and avoid cross-talk confusion is via the medical fluid and not airborne transmissions. See paragraphs [0039], [0040], [0047] [0068]

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and [0069].

In order to better distinguish the present invention from Butterfield et al., claims 1, 5 and 12 have been amended to recite that the transmitter/receiver chips are capable of short-range airborne transmission and that the requests and responses are airborne. These changes are clearly supported by FIG. 21 and paragraphs [0113]-[0117] of the original specification as published. Note that transmitter/receiver chip 280A is not capacitively coupled with the infusion line or the fluid therein as shown by FIG. 5 of Butterfield et al. Advantageously in the present invention the association between patient and medical device is automatically accomplished without the need to first mount the infusion set in the device and access the patient's vascular system. Whatever teaching is supplied by De La Huerga, one skilled in the art would be disinclined from making the combination suggested by the Examiner because it would lead to unwanted cross-talk potential and destroy the primary purpose of Butterfield et al.


Thus, it is respectfully submitted that the claims of this application as amended are patentably distinct from Butterfield et al. and De La Huerga.

A Petition for Extension of Time by three (3) months from September 30, 2008 to December 30, 2008 is submitted herewith along with the authorization for payment of the appropriate fees. No further extensions or fees are believed to be due in connection with this paper. However, the Commissioner is authorized to consider this a request for any necessary extension and charge our Deposit Account, 50-3118 for any additional fees (or credit any over payments) in association with this communication. A timely and favorable response on the merits of the claims as amended is respectfully requested.

Respectfully submitted,
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